IN THE CLAIMS:

1.-12. (Canceled)

13. (Currently Amended) A method of artificial lift in a wellbore, comprising:

providing a jet pump in a production zone of the wellbore;

highly pressurizing and mixing a gas and a liquid to form a first mixture, wherein at least a portion of the gas is dissolved into the liquid; and

injecting the first mixture into the jet pump, thereby forming a second mixture comprising the first mixture and ~~the~~ production fluid and recovering the second mixture from the wellbore using the first mixture to aid in the lifting of the production fluid from the wellbore.[[;]]

14. (Currently Amended) The method of claim 13, further including the ~~steps of~~:

separating from the recovered second mixture a portion thereof representative of the recovered production fluid.

15. (Previously Presented) A method for pumping a production fluid from a wellbore, comprising:

injecting a highly pressurized solution comprising a gas dissolved in a liquid into the wellbore; and

throttling the solution, thereby drawing the production fluid from the wellbore and forming a first mixture comprising the solution and the production fluid, wherein at least a portion of the dissolved gas will escape from the solution, as the mixture is traveling to the surface of the earth, to aid recovery of the production fluid.

16. (Previously Presented) The method of claim 15, further comprising pressurizing a second mixture of a liquid and a gas to form the solution.

17. (Previously Presented) The method of claim 15, further comprising:

pressurizing the liquid;

compressing the gas; and

mixing the liquid and the gas to form the solution.

18. (Previously Presented) The method of claim 15, further comprising separating the first mixture into a gas portion and a liquid portion.

19. (Previously Presented) The method of claim 18, further comprising:

delivering a first portion of the gas portion to a gas production line and a second portion of the gas portion to a gas recycle line; and

delivering a first portion of the liquid portion to a liquid production line and a second portion of the liquid portion to a liquid recycle line.

20. (Previously Presented) The method of claim 15, wherein the liquid is crude oil and the gas is natural gas.

21. (Previously Presented) The method of claim 15, wherein the liquid and the gas are recycled production fluid.

22. (Previously Presented) The method of claim 15, wherein the liquid and the gas are not recycled production fluid.

23. (Previously Presented) The method of claim 15, further comprising recovering the first mixture from the wellbore.

24.—31. (Canceled)

32. (Previously Presented) A system for pumping a production fluid from a wellbore, comprising:

a high pressure multiphase pump coupled to an outlet line and operable to pressurize a first mixture of a liquid and a gas so that at least a portion of the gas dissolves in the liquid; and

a jet pump:

disposed in the wellbore proximate to a formation,

coupled to the outlet line so that the second pump may receive the pressurized first mixture,

having an inlet for receiving the production fluid, and

operable to throttle the first mixture, thereby drawing the production fluid into the inlet, forming a second mixture comprising the first mixture and the production fluid, and allowing at least a portion of the dissolved gas to escape from the solution as the second mixture rises to a surface of the wellbore, thereby lowering a pressure gradient of the second mixture to increase a production rate of the production fluid.

33. (Previously Presented) The system of claim 32, further comprising:

a wellhead sealing the surface of the wellbore;

a return line coupled to the wellbore so that the return line receives the second mixture;

a separator coupled to the return line and operable to deliver a gas portion of the second mixture to a gas return line and a liquid portion of the second mixture to a liquid return line.

34. (Previously Presented) The system of claim 33, further comprising:

a gas production line having a control valve and coupled to the gas return line;

a gas recycle line coupled to an inlet line of the multiphase pump and the gas return line and having a control valve;

a liquid production line having a control valve and coupled to the liquid return line;

a liquid recycle line coupled to an inlet line of the multiphase pump and the liquid return line and having a control valve, and

a computer operable to deliver a first portion of the gas portion to the gas production line, a second portion of the gas portion to the gas recycle line, a first portion

of the liquid portion to the liquid production line, and a second portion of the liquid portion to the liquid recycle line by controlling the control valves.

35. (Previously Presented) The system of claim 32, wherein the liquid is crude oil and the gas is natural gas.

36. (Previously Presented) The system of claim 32, further comprising a liquid and a gas reservoir coupled to an inlet line of the multiphase pump for start-up of the multiphase pump.

37. (Previously Presented) The system of claim 32, wherein the wellbore is cased and an outlet of the jet pump is in fluid communication with an annulus between the casing and the outlet line.